

REMARKS

The present application stands with pending claims 1-39, where claims 1, 16, 29, 33 and 36 are independent. Claims 29 and 33 are amended for the reasons recited below.

As a preliminary matter, Applicant appreciates the Examiner's acknowledgment of allowable subject matter in claims 1, 4-15, 19-28, 36, 38 and 39.

Claims 1, 2 and 33-37 stand rejected under 35 U.S.C. §102(b) as being anticipated by Suzuki et al. (JP 404336256). In response, Applicant respectfully traverses.

First, regarding claims 1 and 36, Suzuki does not disclose or suggest an "ink heater having a substantially flat plate configuration with a planar surface both facing said ink channels and extending in a plane generally parallel to the common plane of the ink channels..." as now recited in claim 1 as amended (emphasis added) and similarly claimed in claim 36 as amended.

In contrast, with reference to Fig. 2 of Suzuki, the common plane of the ink channels/chambers is a horizontal plane (e.g., parallel to the plane formed by bottom plate 17) while the surfaces of the ink heaters 14 that face the ink channels 33a of Suzuki are formed in a vertical plane (e.g., a plane that encompasses the PTC heater 14 and the electrodes 13a and 13b) that is **perpendicular** (NOT parallel) to the horizontal plane of the ink channels/chambers of Suzuki. The present invention is an improvement over the structure in Suzuki since the present invention can use a single horizontal planar heater to cover many ink channels in contrast to Suzuki which requires a separate vertical heater (14) to heat each pair of adjacent ink channels (33a). Accordingly, Suzuki does not disclose or suggest every feature now recited in Claims 1 and 36, and therefore,

Applicant respectfully requests that the §102(b) rejection of claims 1 and 36, and their depending claims 2 and 37 be withdrawn.

Regarding claim 33, Suzuki does not disclose or suggest “attaching a plurality of electrodes to a single side of an ink heater” as now recited in claim 33. As can be seen by Fig. 2 of Suzuki, the electrodes 13a and 13b are attached to opposite sides of PTC heater 14. Accordingly, since Suzuki does not teach the feature of Claim 33, as amended, wherein a plurality of electrodes are attached to a single side of an ink heater, Applicant submits that the §102(b) rejection has been overcome. Thus, Applicant respectfully requests that the rejection of claims 33 and its depending claims 34-37 be withdrawn.

In addition, in response to the rejection of claim 34, Suzuki does not disclose or suggest attaching a plurality of electrodes to an ink heater “in a pattern based on the heat dissipation of the ink jet print head” as recited in claim 34. For this additional reason, Applicant submits that the §102(b) rejection of claim 34 has been overcome and respectfully requests that the rejection of claim 34 be withdrawn.

Claims 29-32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hori et al. (U.S. 4,716,279). In response, Applicant respectfully traverses because Hori does not disclose or suggest a thermistor that forms part of an ink jet print head as recited in claim 29, as amended. Instead, Hori merely discloses use of a thermistor for motor start switches, hair dryers and air heaters (col. 1, lines 20-23). For this reason, Applicant respectfully requests that the §102(b) rejection of claims 29 and its depending claims 31-32 be withdrawn.

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Suzuki in view of Hori; Claims 16 and 17 stand rejected under 35 U.S.C. §103(a) as

being unpatentable over Fujii et al. (U.S. 6,371,598) in view of Suzuki; and Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Fujii et al. (U.S. 6,371,598) in view of Suzuki and Hori.

In response to all of these rejections, Applicant respectfully traverses and repeats the arguments from above for responding to the rejection of claim 1 that Suzuki does not disclose or suggest a flat plate ink heater with a planar surface that both extends in a plane *parallel* to the plane of the ink channels while facing the ink channels. Instead, the surfaces of the heaters facing the ink channels in Suzuki clearly extend perpendicular to the plane of the ink channels (33a). Neither Hori, which doesn't even disclose an ink jet print head, nor Fujii disclose or suggest this feature either. Accordingly, the combination of Suzuki with any combination of Hori and/or Fujii fails to teach or suggest this claim element. For these reasons, Applicant respectfully requests that the 103(a) rejection of claims 3 and 16-18 be withdrawn.

By a separate paper, Applicant submits herewith the fee for a three-month extension of time to respond to the instant Office Action. The Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 18-2284 of Piper Rudnick LLP, duplicate copy attached.

For all of the above reasons, Applicants request reconsideration and allowance of all of the pending claims. The Examiner should contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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